ORDER NO. APD-7512-812

Technical Information

CAR STEREO

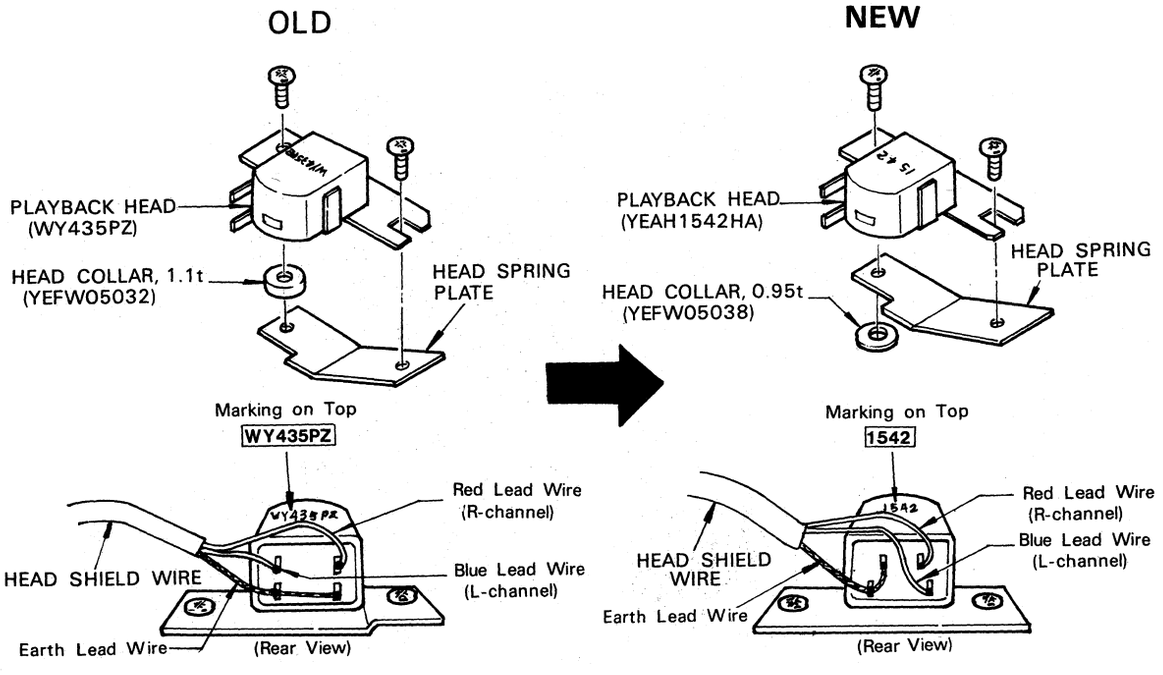
CX-1131EN/ENZ

CHANGE OF PLAYBACK HEAD

- Playback head and head collar of the tape deck parts have been changed as follows.
- Both old and new parts are interchangeable.

REF. NO.	OLD PART NO.	**NEW PART NO.**	DESCRIPTION	Per Set(Pcs)
H	WY435PZ	**YEAH1542HA**	Playback Head	1
M221	YEFW05032	**YEFW05038**	Head Collar	1

- Sets manufactured after Nov., 1975 already have been this change.



File this information with your copy of the Service Manual.

National

Mechanical Adjustment Procedure of Head Section

Adjust the record and erase heads of TD-V66 3-head mechanism with respect to the play head.

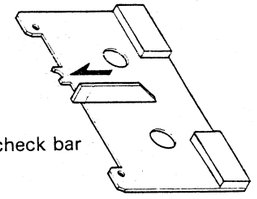
Procedure

1. a) Use gauge M300 and confirm that the gauge can be smoothly inserted in the tape guide of the play head. If the gauge hits the tape guide, adjust the thickness of washers under the cassette guide on the play head side.
   Parts No. of adjustment washers:
   0.1 mm 13270412AT
   0.2 mm 13270412BT
   0.3 mm 13270412CT
   b) Adjust the azimuth with the azimuth adjustment screw.
2. Next, adjust the height of the erase head. After adjusting with the adjustment screw on the left of the erase head, apply locking paint.
3. Perform tilt and azimuth adjustment of the record head.
   a) Roughly adjust the azimuth of the record head with the record head azimuth adjustment screw on the right.
   Check the tilt of the head with gauge M300.
   Perform the checking procedure so that the gauge softly touches the record head and confirm the clearance by applying light from the other side. When there is any clearance at the upper or lower section of the head, adjust with adjustment screw 6 .
   When adjustment screw 6 is tightened, the clearance of the upper section becomes wider.
   b) Adjust the azimuth again so that the output level is maximum.

Guide check

Movement guide check bar

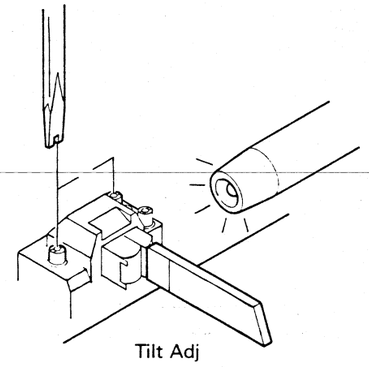
Tilt check



Movement of tilt check bar

Fig. 4-2

Fig. 4-3



Tilt Adj

Fig. 4-4

Electronic adjustment are the same as Main adjustment of Model KD-V6.
Prease refer to servicemanual of KD-V6 A/B/C/E/J/U (No. 4230 — page 9).

5 Standard Schematic Diagram

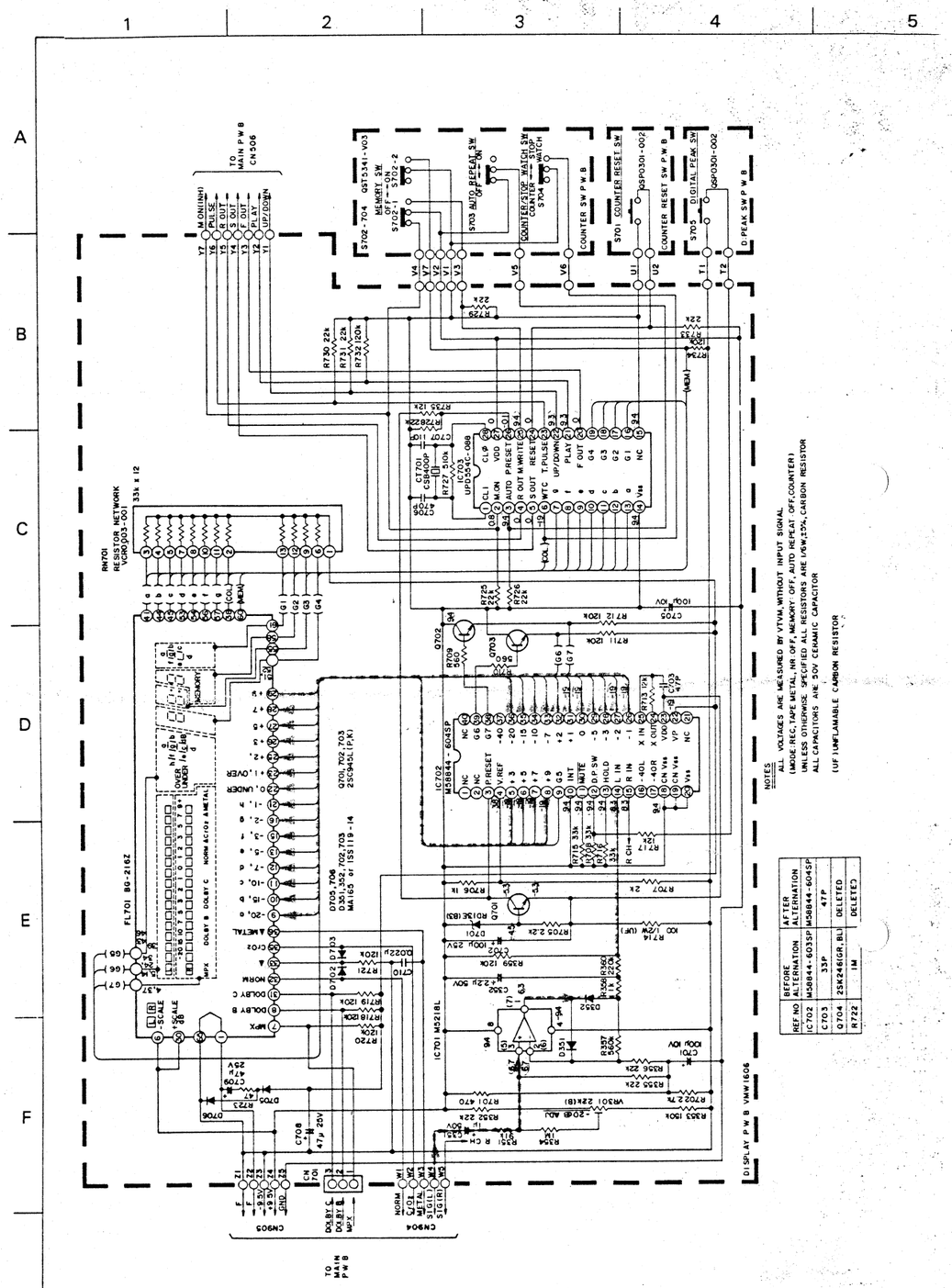
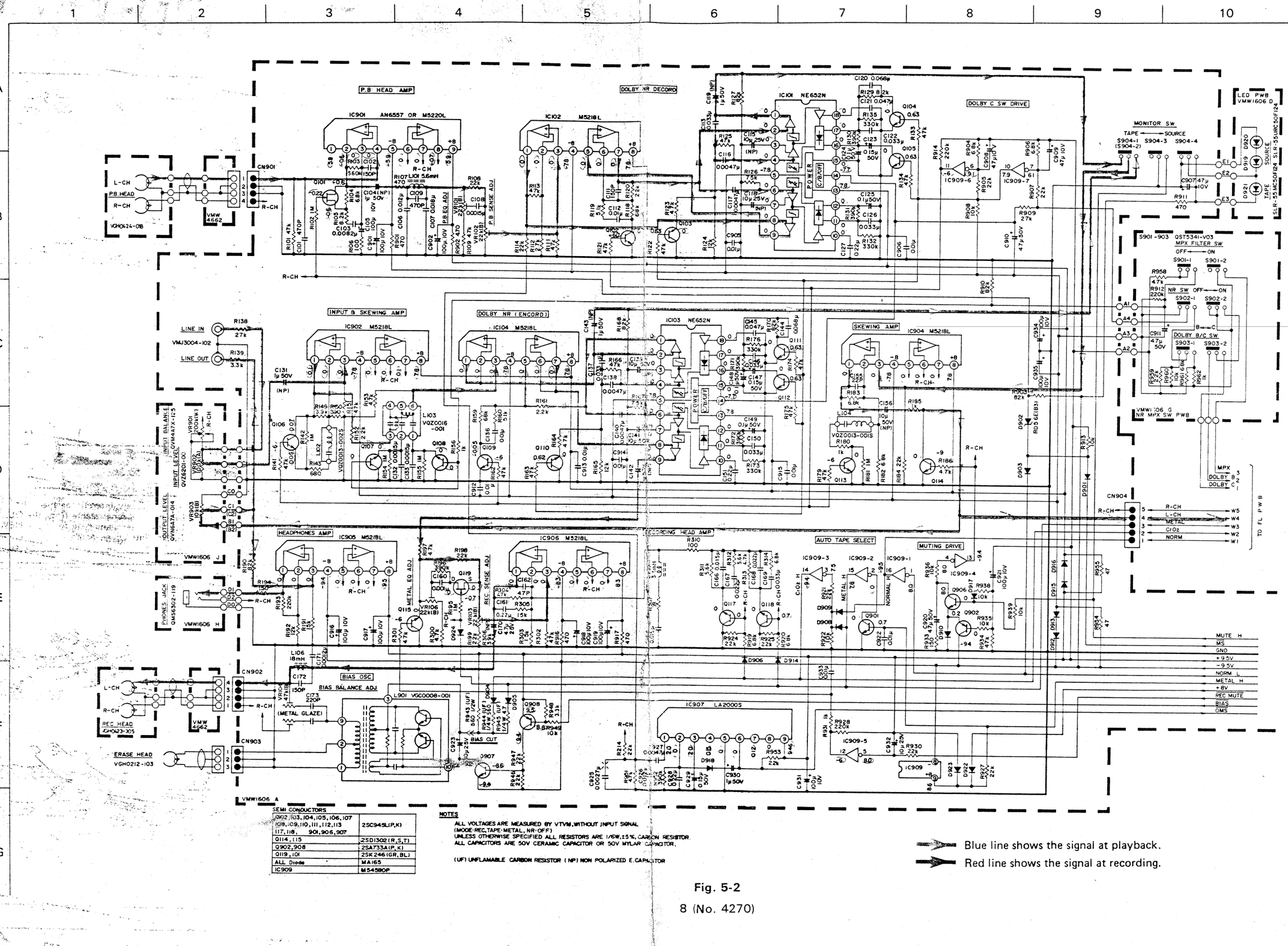


Fig. 5-1

Red line shows the signal at recording.

5 Standard Schematic Diagram (Amplifier Circuit)



SEMI CONDUCTORS	
Q102,103,104,105,106,107 Q108,109,110,111,112,113 Q117,118, 901,906,907	2SC945L(P,K)
Q114,115	2SD1302(R,S,T)
Q902,908	2SA733A(P,K)
Q119,101	2SK246(GR,BL)
ALL Diode	MA165
IC909	M54580P

NOTES

ALL VOLTAGES ARE MEASURED BY VTVM, WITHOUT INPUT SIGNAL (MODE: REC, TAPE: METAL, NR: OFF)
UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE 1/6W, ±5%, CARBON RESISTOR.
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.

(UF) UNFLAMABLE CARBON RESISTOR (NP) NON POLARIZED E.CAPACITOR

Blue line shows the signal at playback.
Red line shows the signal at recording.

Fig. 5-2

9 Exploded View of Mechanism Assembly

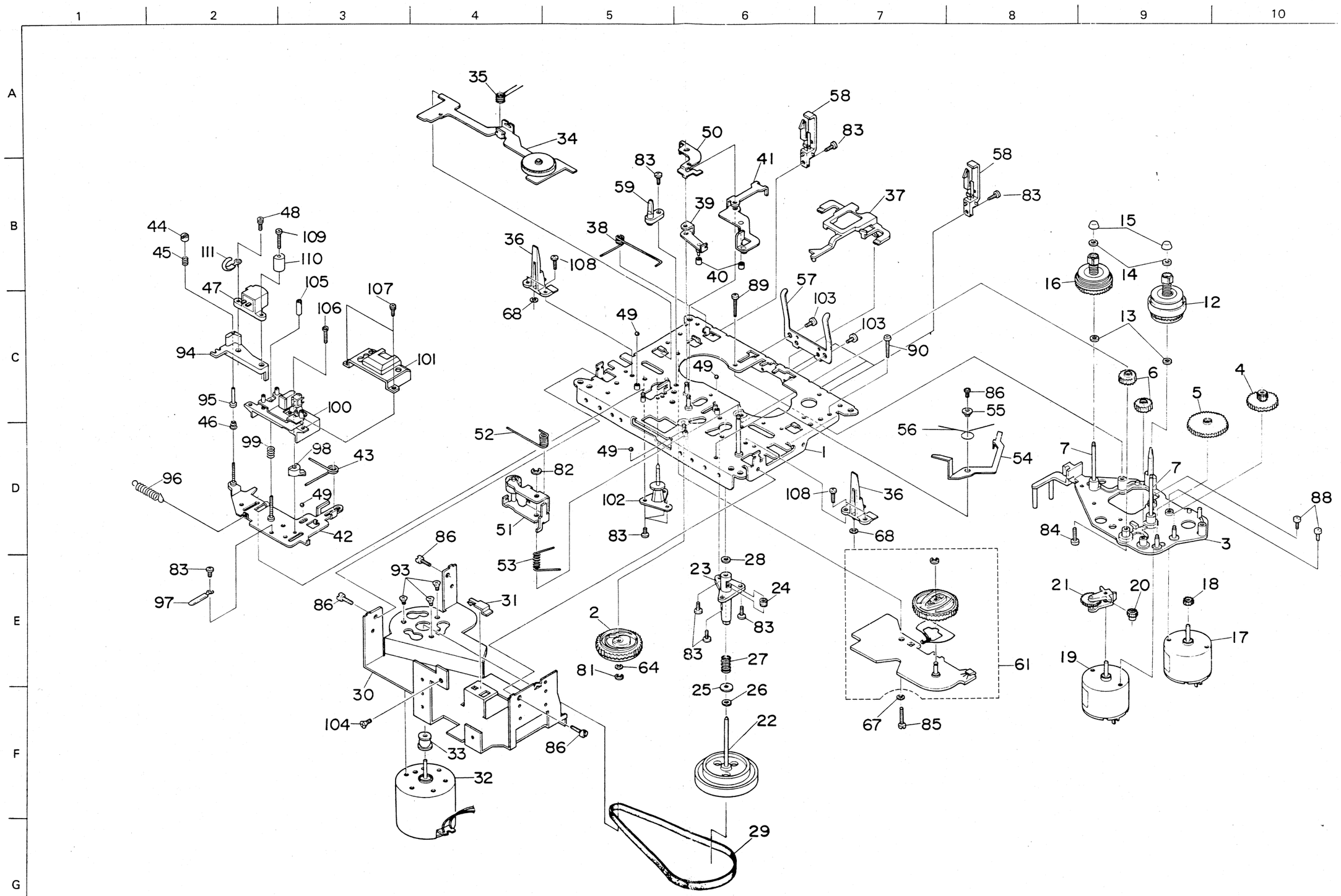


Fig. 9-1

5 Standard Schematic Diagram (Mechanism Control Circuit)

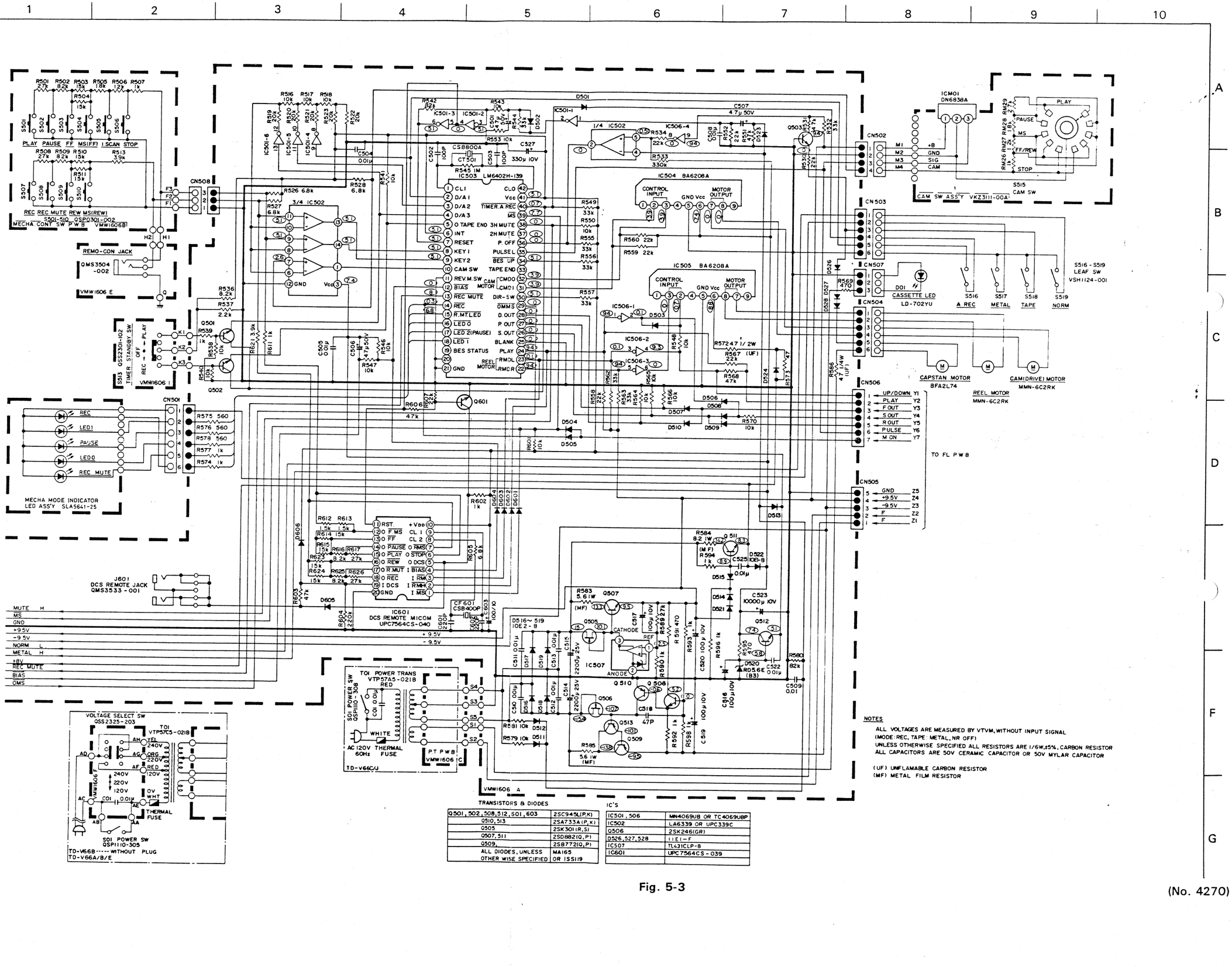


Fig. 5-3

⚠ Parts are safety assurance parts
When replacing those parts, make sure to use the specified one.

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	55	VKH4418-001	COLLAR	DOOR SAFETY	1
	56	VKW3006-061	TORSION SPRING	DOOR SAFETY	1
	57	VKY4279-001	PACK SPRING		1
	58	VSH1124-002	LEAF SWITCH		4
	59	VKS4512-002	GUIDE		1
	61	VKZ3111-00A	SWITCH	CAM SWITCH ASS'Y	1
	64	Q03093-834	WASHER	P.ROLLER CAM	1
	67	WNS2600N	WASHER	CAM SWITCH	1
	68	13270412BT	WASHER	CASSETTE GUIDE	2
	81	REE2000	E.RING	P.ROLLER CAM	1
	82	REE2500	E.RING	PINCH ROLLER	1
	83	SDST2605Z	SCREW	GUID POST	1
		SDST2605Z	SCREW	C.METAL/TENSION	6
		SDST2605Z	SCREW	LEAF SWITCH	4
		SDST2605Z	SCREW	WIRE HOLDER	1
	84	SDST2608Z	SCREW	D.BASE UNIT	1
	85	SDST2612Z	SCREW	D.BASE UNIT	1
	86	SDST2605Z	SCREW	DOOR SAFETY	1
		SDST2605Z	SCREW	F.M.BRACKET	3
	88	DPSP2608Z	SCREW	REEL MOTOR	1
		DPSP2608Z	SCREW	CAM/REEL MOTOR	1
	89	SPSP2613Z	SCREW	REEL MOTOR	1
	90	SPSP2615Z	SCREW	CAM MOTOR	1
	93	SSSP2604Z	SCREW	CAPSTAN MOTOR	3
	94	VKF4110-001	E.HEAD LEVER		1
	95	VKH3001-041	FLANGE COLLAR		1
	96	VKW3002-138	TENSION SPRING		1
	97	VKZ4001-007	WIRE HOLDER		1
	98	VKS4536-002	HEAD COLLAR		1
	99	VKW3001-094	SPRING		1
	101	VKZ3110-001	HEAD COVER		1
	102	VKS4598-00A	TENSION HOLDER	TENSION	1
	103	SDST2604Z	SCREW	PACK SPRING	2
	104	SSST2605Z	SCREW	F M BRACKET	1
	105	VKH4411-001	AZIMATH SCREW		1
	106	SPSX2010N	SCREW		1
	107	LPSP2004Z	SCREW	HEAD COVER	2
	108	SDST2606Z	SCREW	CASSETTE GUIDE	4
	109	LPSP2005Z	SCREW	E.HEAD	1
	110	VKH4874-001	COLLAR (R)	E.HEAD	1

Mechanism Parts List

⚠ Parts are safety assurance parts
When replacing those parts, make sure to use the specified one.

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1	VKL2175-00D	CHASSIS BASE		1
	2	VKS2122-001	P.ROLLER CAM		1
	3	VKL2174-002	DISK BASE		1
	4	VKR3001-001	GEAR(2)		1
	5	VKR3001-002	GEAR(2)		1
	6	VKR3000-001	GEAR(1)		2
	7	VKH4188-002	REEL SHAFT		2
	12	VKR4449-00A	T-UP REEL ASS'Y		1
	13	VKZ4003-010	FELT	BACK TENSION	1
		VKZ4003-010	FELT	BACK TENSION	1
	14	VKR4170-001	RING		1
		VKR4170-001	RING		1
	15	VKS4131-001	REEL STOPPER		1
		VKS4131-001	REEL STOPPER		1
	16	VKR4450-00A	S.REEL ASS'Y		1
	17	MMN-6C2RK	DC MOTOR	CAM	1
	18	VKR4326-001	MOTOR GEAR	CAM MOTOR	
	19	MMN-6C2RK	DC MOTOR	REEL	1
	20	VKR3000-003	GEAR(1)	REEL MOTOR	1
	21	VKS4503-00C	F/R ASS'Y		1
	22	VKF3141-00A	FYWHEEL ASS'Y		1
	23	VKF4122-00A	C.METAL ASS'Y		1
	24	VKR4180-002	ROLLER	TAKE-UP	1
	25	Q03093-622	WASHER	THRUST	1
	26	Q03093-827	WASHER	THRUST	1
	27	VKW3001-010	SPRING	THRUST	1
	28	Q03093-522	WASHER	OIL CUT	1
	29	VKB3001-030	BELT		1
	30	VKL3726-001	F.M.BRACKET		1
	31	VKS4437-001	THRUST PLATE		1
⚠	32	BFA2L74-B	DC MOTOR	CAPSTAN	1
	33	VKR4317-002	MOTOR PULLEY		1
	34	VKL3411-00C	T-UP IDLER ASSY		1
	35	VKW3006-099	TORSION SPRING	TAKE-UP	1
	36	VKS4505-004	CASSETTE GUIDE		2
	37	VKS3162-003	BRAKE BAR		1
	38	VKW4597-002	TORSION SPRING	BRAKE BAR	1
	39	VKL5316-00B	HEAD BASE ARM		1
	40	VKH3000-058	COLLAR		1
		VKH3000-058	COLLAR		1
	41	VKL3421-00A	PINCH R.LEVER		1
	42	VKL3493-00C	HEAD BASE ASS'Y		1
	43	VKW4467-001	TORSION SPRING		1
	44	VKH4240-001	ADJUST SCREW		1
	45	VKW3001-040	C.SPRING		1
	46	VKW4430-001	C.SPRING		1
	47	VGH0212-103	ERASER HEAD		1
	48	LPSP2012Z	SCREW	E.HEAD	1
	49	T41615-004	STEEL BALL	FOR HEAD BASE	4
	50	VKY4278-002	PLATE	FOR HEAD BASE	1
	51	VKP4131-00C	P.R.ARM ASS'Y		1
	52	VKW3006-056	TORSION SPRING	PINCH ROLLER	1
	53	VKW3006-057	TORSION SPRING	RETURN	1
	54	VKL5553-001	DOOR SAFETY		1